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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,888	04/06/2001	Chung Liu	PALM-3588.US.P	5564

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04/14/2005

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EXAMINER
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WU, QING YUAN

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/827,888

Applicant(s)

LIU ET AL.

Examiner

Qing-Yuan Wu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-28 are pending in the application.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lack antecedent basis
  - i. Said electronic device- claims 4-5.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al et al (U.S. Patent 6,061,711), in view of Bodin et al (U.S. Patent 5,675,762), and further in view of Siitonen et al (U.S. Patent 6,049,796).

6. As to claim 1, Song et al teach the invention substantially as claimed including a method of switching between said plurality of programs, comprising:

determining a jump program from said plurality of installed programs [606, Fig. 6; col. 2, lines 7-9; col. 10, lines 57-62];

storing a program state of a currently running program into a context packet [abstract; col. 2, lines 32-34] and calling the jump program [abstract, lines 9-11; 626, 628, 632, Fig. 6]; and

suspending executing of said currently running program [abstract, lines 1-4, 7-11].

7. Song et al do not specifically teach a handheld electronic device, and releasing temporary memory used by said currently running program. However, Bodin et al teach the releasing of memory used by a currently running program when the currently running program is switch to the background [Bodin et al, col. 6, lines 44-47; col. 2, lines 49-52; 420, Fig. 5].

8. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of Song et al and Bodin et al because Bodin et al's method of releasing memory of currently running program would improve the transparency and throughput of Song's system by allowing re-use of memory once the context switching is done.

9. Furthermore, Siitonen et al teach a PDA that "include features such as calculators, calendars, memorandum pads" [Siitonen, col.1, lines 10-28]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of

Song et al, Bodin et al, and Siitonen et al because the teaching of Song et al and Bodin et al would increase the benefit to efficiently utilize the plurality of applications/features available in Siitonen et al's PDA device (i.e. producing a commercially successful and useful product) without having to increase electronic processor performance or inefficiently and negatively impact processor performance [Song et al, col. 1, lines 43-47; Siitonen et al, col. 1, lines 42-58].

10. As to claim 2, Song et al as modified teach the invention substantially as claimed including creating input data for said jump program based on data in said currently running program [Siitonen et al, col. 2 lines 38-50; col. 7, lines 10-17].

11. As to claim 3, Song et al as modified teach the invention substantially as claimed including:

a) locating a return program context packet corresponding to a return program, said return program being one of said plurality of installed programs [col.13, line 40 to col.14, line 7]; and

b) calling said return program with said return program context packet as input, said return program using said return program context packet to restore a program state to said return program [col.13, line 40 to col.14, line 7].

12. As to claims 4 and 5, Song et al as modified teach the invention substantially as claimed including electronic devices is/are palm-sized computer system and/or a wireless telephone [Siitonen et al, col. 4, lines 27-51].

13. As to claim 6, Song et al as modified teach the invention substantially as claimed including said determining comprises:

- a) displaying a menu of choices for said jump program [Siitonen et al, col. 2, lines 38-50; col. 4, line 65 to col. 5, line 2]; and
- b) responding to user input for selecting one of said choices for said jump program [Siitonen et al, col. 5, lines 29-38].

14. As to claim 7, Song et al as modified teach the invention substantially as claimed including said determining comprises:

- a) responding to user selection of a button, said button corresponding to one of said installed programs; and
- b) using said corresponding installed program as said jump program [Siitonen et al, col. 5, lines 29-38].

15. As to claim 8, Song et al as modified teach the invention substantially as claimed including said storing comprises:

storing a program identifier as part of said context packet, said program identifier corresponding to said currently running program [abstract] and storing program-specific data as part of said context packet, said program specific representing said program state [abstract].

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16. Song et al as modified do not specifically teach the step of storing a visual identifier as part of said context packet, said visual identifier used to represent said currently running program. However, Song et al disclosed that the state information or context packet contains the state of the program being context switched out. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have modified Song et al's method of context switching to include a visual identifier to allow a user to easily perform the switching function.

17. As to claim 9, Song et al as modified teach the invention substantially as claimed including:

a) responding to user selection of a return button, said return button corresponding a previously running program, said previously running program being one of said installed programs; and

b) using said corresponding previously running program as said return program [Siitonen et al, col. 8, lines 24-30].

18. As to claims 10-18, these claims are rejected for the same reason as claims 1-9 above.

19. As to claims 19-27, these are system claims that correspond to the method claims 1-9. Therefore, they are rejected for the same reason as claims 1-9 above.

20. As to claim 28, this claim is rejected for the same reason claim 5 above.

**Response to Arguments**

21. Applicant's arguments filed 12/21/04 have been fully considered but they are not persuasive.
22. In the remarks, Applicant argued in substance that:
- a. 1) Context switching taught by Song requires a multitasking operating system and is thus incompatible with a handheld electronic device as claimed which does not use a multitasking operating system. 2) Multitasking operating systems are not typically used in a handheld electronic device. 3) The limited resources of a handheld electronic device is typically not capable of supporting a multitasking operating system.
  - b. Song does not teach or suggest switching between a plurality of programs installed on a handheld electronic device, and suspension of the currently running program when switching between a plurality of programs.
  - c. Bodin does not teach or suggest a handheld electronic device, the currently running program is suspended when memory is released.
  - d. Siitonen fails to teach or suggest suspending a currently running program when calling a jump program.
  - e. Siitonen is incompatible with the system and apparatus of either Song or Bodin.



23. Examiner respectfully traversed Applicant's remarks:

As to points (a1)-(a3), Applicant's claimed invention does not support applicant's arguments. Claimed subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. If Applicant believes the limitation is important feature of the invention, it should be incorporated into the claims for further consideration. In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11,15 (CCPA 1978).

24. As to point (b), applicant's arguments with respect to a "handheld" electronic device in claim 1, and "suspension of the currently running program" are mooted in view of the new ground of rejection.

25. As to points (c)-(d), Applicants argue the patentability of various claims, for example claims 1, 10 and 19, by individually addressing the reference used to reject the claims. Applicant can not show nonobviousness by attacking the references individually where, as here, the rejection is based on a combination of references. See In re Keller, 208 USPQ 871 (CCPA 1981).

26. As to point (e), in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made (i.e. see motivation for combining the

references in paragraph 9 above), and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qing-Yuan Wu



Examiner

MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
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